### From the INTERNATIONAL BUREAU

# PCT

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)

(PCT Rules 44bis.3(c) and 72.2)

SONN & PART Riemergasse 1 A-1010 Wien AUTRICHE	NEN N G E L A N G T
	FRIST:

Date of mailing (day/month/year)
28 September 2006 (28.09.2006)

Applicant's or agent's file reference
R 44449

International application No.
PCT/AT2004/000364

Applicant

FRONIUS INTERNATIONAL GMBH et al

l.	Transmittal	of the	translation	to	the	applicant	
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The International Bureau transmits herewith a copy of the English translation of the international preliminary patentability (Chapter I).	report or
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The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

## 2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

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The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Yolaine Cussac

Facsimile No. +41 22 338 82 70

Facsimile No. +41 22 338 82 70

# PATENT COOPERATION TREATY

# PCT ·

# TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or	agent's file reference	FOR FURTHER	ACTION	See Form PCT/IPEA/416
International ap		7.4(16)		In
	2004/000364		late (dày/month/year) ∩ A	Priority date (day/month/year) 23.10.2003
				23.10.2003
B23K9/		or national classification and	1 IPC	
BESK9/	12			
Applicant				
FRONIU	S INTERNATI	ONAL GMBH		
i. This i	report is the international Article 35 and transmitt	al preliminary examination re ed to the applicant according	eport, established by this to Article 36.	International Preliminary Examining Authority
	REPORT consists of a to			ng this cover sheet.
3. This r	eport is also accompanie	d by ANNEXES, comprising	:	
a. [	٦	and to the International B		shects, as follows:
				amended and are the basis for this report and/or
		ning rectifications authorized		ule 70.16 and Section 607 of the Administrative
				nsiders contain an amendment that goes beyond
	Box.	e in the international applica	tion as filed, as indicated	d in item 4 of Box No. I and the Supplemental
ь. [	(sent to the Interna	tional Bureau only) a total of	(indicate type and numb	er of electronic carrier(s))
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	related thereto, in co	mputer readable form only,	as indicated in the Suppl	, containing a sequence listing and/or tables emental Box Relating to Sequence Listing (see
	Section 802 of the Ac	lministrative Instructions).		
4. This re	port contains indication	s relating to the following ite	ms:	
$\boxtimes$	Box No. I Basis	of the report		
	Box No. II Prior	ity		
	Box No. III Non-	establishment of opinion with	h regard to novelty, inven	tive step and industrial applicability
		of unity of invention	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
$\overline{\boxtimes}$		· ·	35(2) with regard to nove	elty, inventive step or industrial applicability;
		ons and explanations support		,
닐	Box No. VI Certa	in documents cited		
	Box No. VII Certa	in defects in the international	application	
Box No. VIII Certain observations on the international application				
ate of submissi	on of the demand		Date of completion of th	nis report
Vame and mailir	ng address of the IPEA/E	P	Authorized officer	
acsimile No			Telestes No	

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/AT2004/000364

Box I	No. I	Basis of the report		
1.	With reg	gard to the language, this report is based on the internation dunder this item.	onal application in the language in which	it was filed, unless otherwise
[		nis report is based on translations from the original langua hich is the language of a translation furnished for the purp	age into the following language	·
	<u>L</u>	international search (Rule 12.3 and 23.1(b))	•	
	Ļ	publication of the international application (Rule 12.4	))	
	L	international preliminary examination (Rule 55.2 and		
1	With reg receiving this repo	gard to the elements of the international application, this g Office in response to an invitation under Article 14 arort):	report is based on (replacement sheets re re referred to in this report as "original	which have been furnished to the ly filed" and are not annexed to
	the	international application as originally filed/furnished		
	<b>∠</b> the	e description:		
	pa	ges 1-15	<del></del>	as originally filed/furnished
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	pag	ges*	received by this Authority on	
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3. C	7		inar box relating to sequence Listing.	
ے <u>د</u>		amendments have resulted in the cancellation of:		
	$\exists$	the description, pages		
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	吊	the drawings, sheets/figs		
	니 	any table(s) related to sequence listing (specify):		
<sup>4.</sup> L	they	report has been established as if (some of) the amenda have been considered to go beyond the disclosure as file	ments annexed to this report and listed led, as indicated in the Supplemental Box	below had not been made, since (Rule 70.2(c)).
		the description, pages		
		the drawings, sheets/figs		
		the sequence listing (specify):		
		any table(s) related to sequence listing (specify):		
• If	item 4 aj	pplies. some or all of those sheets may be marked "supe		

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/AT2004/000364

		V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1.	Statement				
	Novelty ()	N)	Claims	1-20	YES
			Claims		NO
	Inventive	step (IS)	Claims	1-20	YES
			Claims		NO
	Industrial	applicability (IA)	Claims	1-20	YES
			Claims		NO

### 2. Citations and explanations (Rule 70.7)

This report makes reference to the following document:

D1: US-A-4 533 817

D1 is regarded as the prior art closest to the subject matter of claim 1. It discloses a method according to the preamble of claim 1.

The subject matter of claim 1 differs from the known method in that during the welding process, at least one mechanical adjustment process is carried out in order to determine the position of the welding wire, the welding wire being used as a sensor.

Therefore, the subject matter of claim 1 is novel (PCT Article 33(2)).

The problem to be solved by the present application can be regarded as that of determining the position of the welding wire in a manner that is more precise than when the current and voltage values are measured.

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/AT2004/000364

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

The solution to this problem as proposed in claim 1 of the present application involves an inventive step (PCT Article 33(3)) for the following reasons:

The prior art contains nothing that suggests using the welding wire as a mechanical sensor during the welding process.

Claims 2-20 are dependent on claim 1 and therefore likewise meet the PCT requirements for novelty and inventive step.